The Regenstrief Medical Record System - Experience with MD Order Entry and Community-wide Extensions

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Abstract:

The Regenstrief Medical Record System (RMRS) now encompasses three hospitals on the Indiana University Medical Center campus, and all of their clinics. It captures data for about 60,000 hospitalizations and 600,000 outpatient encounters per year. At present over 800,000 patients and nearly 100,000,000 separate observations are carried by RMRS. We have been deliberately opportunistic in the capture of clinical data. We capture laboratory and medication information from three different laboratory and pharmacy systems, vital signs and nursing observations from an automated bed side machines (Vital Net) on one inpatient service, full text admission, discharge and visit notes, and surgical pathology, radiology and nuclear medicine reports from three different dictation systems, EKG tracings and diagnoses from EKG carts, registration and transfer information from three different ADT systems. We use HL7 as our principle message standard for linking these systems. We also capture a varying amount of clinic information in fully coded form from clinica and patient specific encounter forms and we code and record the diagnostic impressions from all special studies.

We have extended the system to a total of 30 remote Indianapolis sites some of which are independent entities and some controlled by medical center facilities. These are from 1 to 8 miles from the Wishard and connected to it by telephone links. The ease and success of the remote installations has been proportional to the administrative control the medical center hospitals have over them.

At Wishard, where the system has been installed the longest, the computer contains almost everything but providers handwritten notes. Physicians and nurses use the RMRS as their primary source of patient data via video screen look up and paper reports. Medicine physicians use it to enter all of their orders and to create their own scut cards, and researchers use it to find patients and data needed for clinical studies. We will demonstrate all components of this system.